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Coated active particles for detergents, set free at appropriate temperature - obtained by dispersing particles with melt of coating material and granulating at below melting range

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Production of coated solid particles comprises cooling a dispersion of particles in a melt of a room-temperature solid, water-insoluble coating material and then granulating at a temperature within the plastic solidifying range of the melt, the particles having a minimum size of at least 0.05 (especially at least 0.1) mm.

The coated particles are claimed *per se*.

USE

The particles are used in cleaning agents e.g. detergents, especially in cleaning hard surfaces, i.e. in dishwasher machines or in washing-up liquids (claimed).

ADVANTAGE

The particles are rapidly and completely set free from the coating when the temperature exceeds the lower limit of the melting range. Less than 30 wt.% is set free in water at temperatures after 10 minutes at within 6 °C below the lower melting limit.

PREFERRED PARTICLES

The coating has a melting range of 45-75 °C and is especially a paraffin with melting point 50-55°C, while the particles are in crystalline form and are enzymes, bleaching agents, bleach activators, surfactants or perfumes, especially N, N, N',N'-tetraacetylethylenediamine (TAED).

Granulation is followed by sieving with a mesh of no more than 2 mm.

EXAMPLE

A product showing only a small amount of actives set free below the melting range within 10 minutes but as much as 80% dissolving in a detergent solution after 1 minute at a temperature above the melting range was obtained by contacting at 55 °C 1 part TAED of average crystallite diameter 0.1 mm with 1 part paraffin (m.pt. 51-53 °C) and then granulating at 48 °C with a 1 mm mesh. (LB)
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